



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,241	09/22/1998	ANDRE JOUANNEAU		8350

7590 02/24/2003

ANDRE JOUANNEAU
6028 SOUTHPORT DRIVE
BETHESDA, MD 20814

EXAMINER

BEHREND, HARVEY E

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/155241

Applicant(s)

Jougnneau

Examiner

Behrend

Group Art Unit

3641

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10/21/02
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-38 is/are pending in the application.
- Of the above claim(s) 13-38 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-12 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 3673

1. This application contains claims 13-38 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant argues that there are differences in experimental conditions between his invention and Williams et al. The examiner disagrees. While applicant argues on page 2 of the 10/21/02 response that the pH must be less than one to achieve plasma in the cathode, this argument is not supported by applicants own specification.

The specification on page 4 under the heading "Conditions Required to Create a Plasma of Hydrogen Isotopes Inside a Solid" states in lines 13 and 14, that the electrolyte is an ionic solution with an acid or basic pH!

The sentence bridging pages 20 and 21 of the specification states that a plasma is created in the cathode with an electrolyte having a pH greater than one!

The specification on page 9 lines 22+ refers to the creation of plasma in a solid in prior art experiments wherein the pH ranged from 0.4-1.8!

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately

Art Unit: 3673

teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure, for the reasons set forth in section 3 of the 4/19/01 Office action.

Applicant argues that the issues regarding an adequate written description, an enabling disclosure and operativeness of obtaining nuclear reactions, etc., with applicants invention are not pertinent since claims 1-12 do not recite or refer to such.

However, such nuclear reactions are recited for example in claims 13-26. While such currently represents non-elected species, it is pointed out that claim 1 is a generic claim to said non-elected species and if claim 1 were subsequently found to be allowable, the issue of sufficiency of disclosure and operativeness in regard to claims to the non-elected species, would have to be considered. Note in this respect, the election of species requirement set forth in section 2 on page 2 of the 8/28/00 Office action.

Accordingly, the issues raised by the examiner concerning an adequate written description, an enabling disclosure and operativeness of the embodiments wherein nuclear reactions are alleged to be obtained, are still considered pertinent and must be addressed by applicant.

On this same point, it is noted that applicant on page 5 of the 10/21/02 response, now admits that such nuclear reactions cannot be obtained.

However, even if the "cold fusion" issue was not present, applicants disclosure is still insufficient and non-enabling. In this respect, note particularly the issues in the paragraph bridging pages 5 and 6 (as well as the first two full paragraphs on page 6) of the 4/19/01 Office action. Such issues concerning the alleged formation, manipulation

Art Unit: 3673

and use of a "plasma" in a cathode, remain whether or not the claimed invention is directed to "cold fusion".

Applicants other arguments are unpersuasive.

Applicant now argues that a critical condition for creating plasma in the cathode is for the pH of the electrolyte solution to be less than one (e.g. see pages 2, 12 of the 10/21/02 response).

What is of particular interest here is that this particular argument of applicant basically renders a good portion of applicants disclosure inoperative because the specification clearly states that one can also use a bath with a pH greater than one and, that the bath can even be basic (stating that it merely takes longer for a given number of protons to enter the cathode), e.g. see the specification on page 4 under the heading "Conditions Required to Create a Plasma of Hydrogen Isotopes Inside a Solid" Which states in lines 13 and 14, that the electrolyte is an ionic solution with an acid or basic pH, the sentence bridging pages 20 and 21 of the specification which states that a plasma is created in the cathode with an electrolyte having a pH greater than one, and, the specification on page 9 lines 22+ which refers to the creation of plasma in a solid in prior art experiments wherein the pH ranged from 0.4-1.8!

Applicant even argues on page 7 of the 10/21/02 response that said prior art experiments wherein the pH ranged from 0.4-1.8 show formation of plasma inside palladium!

It is noted that applicant at the top of page 2 of the 10/21/02 response, states that Williams et al have a pH of 1.2.

Thus, according to the teachings in applicants own specification (as indicated by the above referenced examples), a "plasma" must also inherently be formed in the cathodes of such systems as those of Pons et al and Williams et al (referred to on page 8 of the 4/19/01 Office action and, the related issues set forth by the examiner on said page 8 must still be addressed).

Applicant has not set forth any written description nor disclosure of how and in what manner, he is actually able to determine that a "plasma" exists inside his cathode, and, that a "plasma" does not exist inside the cathode of such systems as that of Williams et al and Pons et al.

It appears from the 10/21/02 response that applicant simply "assumes" that a plasma exists in his cathode and, simply "assumes" that no plasma exists in the cathodes of systems such as that of Williams et al and Pons et al.

It applicant can actually create plasma inside his cathode but Williams et al cannot, it can only be because of some non-disclosed, additional apparently critical feature/parameter, etc., which applicants invention has but which is lacking in systems such as that of Williams et al and Pons et al.

More importantly, applicant is incorrect in arguing that systems such as that of Pons et al only incorporate deuterium atoms into the cathode rather than hydrogen isotope nuclei, i.e. protons, deuterons and tritons.

While Pons et al in the beginning (e.g. see page 4 lines 3+) refers broadly to accumulating isotopic hydrogen atoms in the metal lattice (cathode), Pons et al state that these deuterium atoms in the metal lattice exist predominantly as freely, highly,

Art Unit: 3673

mobile nuclei (i.e. as protons, deuterons and/or tritons)! See for example in this respect, Pons et al on page 20 (second full paragraph), page 24 (first full paragraph), page 25 (second full paragraph), page 28 (first full paragraph), page 39 (bottom half).

It is noted that applicant in the paragraph bridging pages 5 and 6 of the 10/21/02 response essentially utilizes the same language as that of Pons et al (i.e. freely movable) in describing his plasma particles inside his cathode.

Applicant appears to dismiss many of the issues raised by the examiner in said section 3 of the 4/19/01 Office action by indicating that such could be readily determined by one skilled in the art or, by simply "assuming" that the result desired takes place in the manner indicated but, provides no factual evidence in support thereof. Note also that one cannot properly rely on the Remarks section of an amendment to set forth facts which the specification itself must recite to be complete.

As an example of such, applicant argues on page 15 of the 10/21/02 response, that the platinum anode should have a purity of 99.9% (a feature not recited in applicants specification). However, even if the specification had disclosed such a purity, it is still a well known fact in this art that the platinum from the anode (as well as any impurities therein) will leach out or dissolve into the electrolyte to be subsequently deposited onto the cathode as a contaminate. Note that Pons et al on page 59 give an example of impurities which could be found in palladium (a platinum material would have similar impurities). Williams et al on pages 380 and 382, Albagli et al on pages 144, 145, 146 and Flanagan et al on page 1407, 1408 all illustrate that elements can leach out of any component in contact with the electrolyte (including the container walls

Art Unit: 3673

and the anode) and plate out on the cathode, all of which can cause problems with hydrogen absorption and, thus prevent successful operation of applicants invention.

Accordingly, all issues set forth in said section 3 of the 4/19/01 Office action are still considered pertinent in determining patentability of applicants invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, for the reason set forth in the objection to the specification, in section 3 above.

Additionally, since the claims do not recite the limitation that the pH is less than one (which applicant has now indicated on pages 2 and 12 of the 10/21/02 response as being critical to his invention of forming a plasma) nor do all claims recite vibrating the cathode (which applicant now indicates on page 12 of the 10/21/02 response as also being critical to his invention of forming a plasma), the claims are not enabled by the disclosure. See MPEP 2164.08(c) and In re Mayhew, 188 USPQ 356, 358.

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-12 are rejected under 35 U.S.C. 101 because the invention as disclosed is inoperative and therefore lacks utility, for the reasons set forth in section 3 above and in section 6 of the 4/19/01 Office action.

As previously pointed out to applicant (e.g. see section 3 of the 4/19/01 Office action), the disclosure is insufficient as to how and in what manner, applicant is able to produce "plasma" in the cathode. This is particularly so since, as pointed out above, applicant argues that references such as Williams et al and Pons et al are allegedly not able to produce plasma in their cathode, even though the pH of their electrolyte is within

Art Unit: 3673

the range which applicants specification states will cause formation of plasma in the cathode.

As pointed out above, if applicant actually is able to create "plasma" in his cathode whereas the systems of Williams et al, etc., cannot, it is only because applicants invention actually utilizes some additional apparently critical but non-disclosed features/parameters, etc., which enables applicants invention to be operative to produce plasma in the cathode, and, which are presumably lacking in systems such as that of Williams et al and Pons et al.

7. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the reasons set forth in section 7 of the 4/19/01 Office action.

Applicants arguments are unpersuasive of any error. Merely arguing that the examiner has confused the F & P concept with applicants invention, does not address the issues presented in this rejection nor, does it remove said issues from contention.

Furthermore, it would not appear that different concepts are involved since, as pointed out in section 3 above, Pons et al specifically state that the isotopic hydrogen in the metal lattice (cathode) exists as freely mobile nuclei (protons, deuterons and/or tritons).

Further, the claims are incomplete in failing to recite all of the critical parameters necessary to produce the plasma. For example, applicant on page 2 of the 10/21/02 response now argues that the pH must be less than one for plasma to be created in the

Art Unit: 3673

cathode and, on page 12 that the cathode must be vibrated. Since all claims do not recite each of these features which applicant has now argued as being critical, the claims fail to comply with 35 USC 112 second paragraph in failing to point out and distinctly claim the invention. See MPEP 2172.01 and In re Venezia, 189 USPQ 149 (CCPA 1976); In re Collier, 158 USPQ 266 (CCPA 1968).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4, 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by any of Williams et al, Pons et al, Ormorit, Kubota or Makoto, for the reasons set forth in section 9 of the 4/19/01 Office action.

Applicants arguments have been considered but they are unpersuasive.

Additionally the arguments do not appear to specifically address each of the issues set forth in said section 9 of the 4/19/01 Office action.

Art Unit: 3673

Ormorit is not limited to only surface adsorption. The reference also talks about the absorption of hydrogen.

In any event, as already pointed out in section 3 above, Pons et al specifically state that in these electrolytic systems, the isotopic hydrogen atoms will exist in the metal lattice as freely mobile nuclei (i.e. as protons, deuterons and/or tritons) (e.g. see for example, pages 24, 25, 28, 39).

10. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by any of Bellanger et al, Schulten et al, Buechler, Lovelock (I) or Pavelle et al, for the reasons set forth in section 10 of the 4/19/01 Office action.

Applicants arguments are unpersuasive. Said arguments do not show any error in the reasoning used by the examiner in applying any of these references. It was already a known fact as of applicants effective filing date that in such electrolytic systems, the isotopic hydrogen will inherently exist in the cathode as mobile nuclei. It is noted that such is even disclosed in Pavelle et al.

Pavelle et al is a U.S. patent and all U.S. patents carry a presumption of validity (see 35 USC 282). Thus it is not necessary for Pavelle et al to show all the features referred to by applicant in the paragraph bridging pages 22 and 23 of the 10/21/02 response (which, as pointed out in section 3 above, even applicants own specification does not show!).

11. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process... may obtain a patent therefor..." (Emphasis

Art Unit: 3673

added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-12 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4 of copending Application No. 09/222,311. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

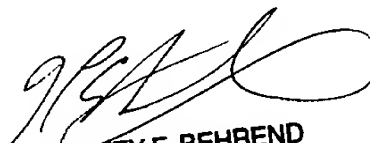
Art Unit: 3673

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is (703) 305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Behrend/kl
January 30, 2003



HARVEY E. BEHREND
PRIMARY EXAMINER